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| Table S8. Primer list | | | | | | |
| **Group** | **Primer name** | **Target gene** | **RAP-DB ID** | **Product size (bp)** | **Forward primer (5'→3')** | **Reverse primer (5'→3')** |
| Design pRGE31-sgRNA vector | | | | | | |
|  | Vec-Pro13a | Pro13a-I |  |  | AGAGTTGTGCAGATGATCCGTGGCAAACGTAGCTGGTTGCCAGAAGTTTTAGAGCTAGAAATAGCAAGTT | |
|  | Vec-Pro13b | Pro13b-I/II |  |  | AGAGTTGTGCAGATGATCCGTGGCAAAACGCAGCTGATTGCAAGAGTTTTAGAGCTAGAAATAGCAAGTT | |
| Screening positive sgRNA clonning | | | | | | |
|  | Screen-Pro13a | Pro13a-I |  | 226 | AAACCACGTGATGTGAAGAA | AAACTTCTGGCAACCAGCTA |
|  | Screen-Pro13b | Pro13b-I/II |  | 222 | AAACCACGTGATGTGAAGAA | TAAAACTCTTGCAATCAGCT |
| *in vitro* cleavage assay | | | | | | |
|  | InVitro-pro13a | Pro13a-I |  | 346 | TCGTATTTGCTCTCCTTGCT | GATACCACATATGGATGGCAA |
|  | InVitro-pro13b | Pro13b-I/II |  | 433 | TCGTCTTTGCTCTCCTTGCT | ACACCGCCAAGGGTGGTAA |
| Seed storage protein genes. | | | | | | |
|  | qRT-Pro13a-I | *Pro13a.1* | Os07g0206400 | 88 | CAACTACAGTCGCATCTCCTAC | GGGTTGCCACTATGCTATACTG |
|  | *Pro13a.2* | Os07g0206500 |
|  | qRT-Pro13a-II | *Pro13a.3* | Os12g0269100 | 117 | TCACCCGTGTTTCAACTGAG | CACAATAGCCTGAACACTGC |
|  | *Pro13a.4* | Os12g0269200 |
|  | qRT-Pro13b-I | *Pro13b.1* | Os07g0219250 | 101 | ATATTAGGCAATATCAGGTGCAG | GCTTGCCGCAATGCTATACT |
|  | *Pro13b.2* | Os07g0219300 |
|  | *Pro13b.3* | Os07g0219400 |
|  | *Pro13b.4* | Os07g0220000 |
|  | qRT-Pro13b-II | *Pro13b.5* | Os05g0328333 | 110 | TTCACACAGTTCAAGCATTA | AGAGGCGCTGCATGCAGCAA |
|  | *Pro13b.6* | Os05g0328466 |
|  | *Pro13b.7* | Os05g0328632 |
|  | *Pro13b.8* | Os05g0328800 |
|  | *Pro13b.9* | Os05g0328901 |
|  | *Pro13b.10* | Os05g0329001 |
|  | *Pro13b.11* | Os05g0329100 |
|  | *Pro13b.12* | Os05g0329300 |
|  | *Pro13b.13* | Os05g0329350 |
|  | *Pro13b.14* | Os05g0329400 |
|  | *Pro13b.15* | Os05g0329700 |
|  | *Pro13b.16* | Os05g0329200 |
|  | *Pro13b.17* | Os05g0330150 |
|  | *Pro13b.18* | Os05g0330600 |
|  | *Pro13b.19* | Os05g0331366 |
|  | *Pro13b.20* | Os05g0331532 |
|  | *Pro13b.21* | Os05g0331800 |
|  | *Pro13b.22* | Os05g0332000 |
|  | qRT-Pro16 | *Pro16.2* | Os06g0507200 | 81 | CTCAATTTGCCCTCCATGTG | AGAACCGCAATGACCAGTAG |
|  | qRT-Pro10 | *Pro10.4* | Os11g0535525 | 97 | TTATTTGTGCTGGACTCGGG | GAGAGTTGGAAGTTGACAGGG |
|  | qRT-GluA | *GluA-1* | Os01g0762500 | 234 | AATGATGGTGAAGTGCCGGT | TCACGCCTGTATGCTTGAGG |
|  | *GluA-2* | Os10g0400200 |
|  | qRT-GluB | *GluB-1a* | Os02g0249800 | 104 | ATTGAGCAACACTCTGGGCA | TGGCTCTGTAGCCTCTTTGC |
|  | *GluB-1b* | Os02g0249900 |
|  | *GluB-2* | Os02g0249600 |
|  | *GluB-4* | Os02g0268300 |
|  | *GluB-5* | Os02g0268100 |
|  | qRT-GluC | *GluC-1* | Os02g0453600 | 231 | CACAAGGGCCAATAGCCAGA | GGTCACGTACATCACCGTGT |
|  | qRT-GluD | *GluD-1* | Os02g0249000 | 100 | AAGACAGAGCGACCAAGCTC | ATGTGCAACACTAGCCGGAA |
|  | qRT-Glb | *Globulin* | Os05g0499100 | 122 | AGTCGGAGATGAGGTTCAGG | GAACATCGGCTGGAACCTC |
| Sarch biosynthesis genes | | | | | | |
|  | qRT-AGPS2 | *AGPS2b* | Os08g0345800 | 211 | GCACGAGTGTGCTTGGAATC | GCTCTTGACAGGTGACGGTT |
|  | qRT-AGPL2 | *AGPL2* | Os01g0633100 | 204 | ATGCTAACTTGGCCCTCACC | CGATGCTAACGCGTGAAGAG |
|  | qRT-GBSSI | *GBSSI* | Os06g0133000 | 197 | ACTACCAGCCCAATGGCATC | GATTCCGGCCTTCATCCAGT |
|  | qRT-SSI | *SSI* | Os06g0160700 | 203 | TGGCTAGTGAGCAGGAGTCT | CCCGTTCATGTATCTCGGCA |
|  | qRT-SSIIa | *SSIIa* | Os06g0229800 | 199 | GCGGTAGAAGAGGAGACGTG | AGGGAGAACATTCAGCAGCC |
|  | qRT-SSIIIa | *SSIIIa* | Os08g0191433 | 202 | AGCAGCGAATGGGAGAACAA | AGCGGCCTTGAGTTTCTGTT |
|  | qRT-BEI | *BEI* | Os06g0726400 | 208 | CCGAGAGCCATGATCAGTCC | GGATGGCCAAACTCATTGCC |
|  | qRT-BEIIa | *BEIIa* | Os04g0409200 | 210 | TGCTGATGGATCCCCTGCTA | CGCAGCGAATTTGGTCGTTT |
|  | qRT-BEIIb | *BEIIb* | Os02g0528200 | 196 | GGAATCCAAATGCAGACCGC | TATGGGATTTCTCCTGCGGC |
|  | qRT-ISA1 | *ISA1* | Os08g0520900 | 198 | GTAGAGTTGATGCCCTGCCA | AATTCCCCGTTTGTGAGCCT |
| Chaperones and SSP trafficking proteins. | | | | | | |
|  | qRT-BIP-1 | *BIP-1* | Os02g0115900 | 198 | ACGATGCTGTCGTGACTGTT | CATCGAATGTCCCACCACCA |
|  | qRT-PDIL1-1 | *PDIL1-1* | Os11g0199200 | 188 | CCAGTACTTTGGGCTGAGGG | TAACAGGCTCGTCGTTGACC |
|  | qRT-PDIL2-3 | *PDIL2-3* | Os09g0451500 | 190 | GGCACTGCAAGAAATTGGCA | ACTCTAGCCCCCTGGTAAGG |
|  | qRT-CNX | *CNX* | Os04g0402100 | 207 | CGGAGGCTAACAAGCCTGAA | GGATCTCTTGGGGCTTCCAG |
|  | qRT-HSP70 | *HSP70* | Os01g0840100 | 106 | TGGCATCCTCAACGTCTCT | CATCTTCTCGATCTCCTCCT |
|  | qRT-HSP20 | *HSP20* | Os11g0244200 | 144 | TGGAGGTGGACGAGGCCA | TGAACCGCCTCCAGAACCT |
|  | qRT-HSP90 | *HSP90* | Os04g0107900 | 134 | ATCTCCAACTCTTCTGATGC | TCGATGATGGAGAGAGTCTT |
| Transcription factor | | | | | | |
|  | qRT-HSFB2b | *HSFB2b* | Os08g0546800 | 149 | GAAAGATCTTCTTCGACGGT | CGCAAGTACGCAACTGAAC |
|  | qRT-NAC110 | *OsNAC110* | Os09g0552900 | 147 | CCAGAACAGGTCAATTGGTA | GAGTCCTGTAACTGAATCCC |
|  | qRT-HSFC1b | *HSFC1b* | Os01g0733200 | 127 | AAGACGTTCCACATGGTGAG | GCTTGAAGTAGGAGGGGAGG |
|  | qRT-PCL1 | *OsPCL1* | Os01g0971800 | 137 | GCACAAGAGGTTCGTGGAG | CGTAGAGGCGATACTTCTGG |
|  | qRT-hox6 | *OsHox6* | Os09g0528200 | 122 | CAGATCAAGTCGCTGGAGT | TTGTTCTGGAACCAGATGGC |
|  | qRT-WRKY76 | *WRKY76* | Os09g0417600 | 117 | GTCAAGGACGGGTACCAATG | CACCTTCTTCTTCACCGGG |
|  | qRT-RR6 | *RR6* | Os04g0673300 | 122 | GTCAACATGATCATCACCGA | ACGTTCTCCGACGACATGAT |
|  | qRT-RR10 | *RR10* | Os12g0139400 | 117 | AGTAACCACTGTTGATTCGG | ATGATCAGGTTCACTCCAAC |